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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,374	11/03/2003	Kia Silverbrook	YU190US	1139

24011 7590 02/23/2005

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER	
STEPHENS, JUANITA DIONNE	
ART UNIT	**PAPER NUMBER**
2853	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/698,374	SILVERBROOK, KIA	
	Examiner	Art Unit	
	Juanita D. Stephens	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *CIP filed 11/03/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/160,273.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/03/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 12, line 8 replace "outer wall portion 64" with –outer wall portion 66--.

On page 12, lien 9 replace "nozzle chamber wall 60" with –nozzle chamber wall 62--.

On page 12, last paragraph, line 2 replace "rim 65" with –rim 80--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook (US 6,435,667 B1)

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this

application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The Structure of Silverbrook (US 6,435,667 B1) in Figure 1 is identical to the structure of Figure 5A of the application, however, there is no description of Figure 1 of the patent. The description of Figure 1 in the patent does not correspond with the actual Figure. It appears that the description of Figure 1 in the patent describes a different nozzle arrangement.

As best construed, Silverbrook discloses a nozzle arranged (10) for an inkjet printhead (as seen in Fig. 1), the nozzle arrangement including: 1) a nozzle chamber (30) for holding ink, 2) an actuator (38) in fluid communication with the nozzle chamber, the actuator being movable with respect to the nozzle chamber upon actuation, 3) a fluid ejection port (32) in fluid communication with the nozzle chamber for allowing ejection of ink upon movement of an operative portion of the actuator relative to the nozzle chamber during actuation, the fluid ejection port defining an ejection axis (upward direction of ink ejection) generally perpendicular to a plane within which the fluid ejection port is disposed (horizontal direction of the nozzle chamber), 3) an inlet channel (52) in fluid communication with the nozzle chamber for supplying ink thereto from an ink supply, 4) wherein the inlet channel is positioned for supplying ink to refill the nozzle chamber at a position radiallly displaced from the ejection axis (as seen in Fig. 1), 5) wherein the inlet channel is orientated such that the ink enters the nozzle chamber along an inlet axis (horizontal direction of nozzle chamber) that is substantially parallel to, but displaced from the ejection axis (as seen in Fig. 1), 6) wherein the fluid

ejection port (32) is formed in a roof portion (28) that at least partially defines the nozzle chamber (30), the nozzle arrangement being configured such that, upon actuation, an operative portion of the actuator is moved relative to the fluid ejection port, thereby causing the ink to be ejected from the fluid ejection port, 7) at least part of the operative portion of the actuator defines a roof portion (28) that at least partially defines the nozzle chamber and the fluid ejection port is formed in the roof portion, wherein the nozzle arrangement is configured such that, upon actuation, the roof portion, and thereby the fluid ejection port, are moved relative to the nozzle chamber, thereby causing the ink to be ejected (50) from the fluid ejection port, 8) upon return of the actuator to a quiescent position after actuation the ejection of the ink through the fluid ejection port, the nozzle chamber refilled with ink via the inlet channel, 9) wherein the nozzle chamber is refilled with ink from the inlet channel due to a reduction in pressure within the nozzle chamber caused by surface tension of a concave ink meniscus across the fluid ejection port after ink ejection, 10) wherein the actuator is a thermal actuator (38), 11) wherein the actuator comprises at least one passive anchor and at least active anchor, wherein the active anchor is resistively heatable by means of an electric current to cause thermal expansion relative to the passive anchor, 12) wherein the actuator is moveable within a plane upon actuation, the plane intersecting and being parallel with the ejection axis, 13) wherein the actuator is mounted to flex about an anchor point upon actuation, 14) wherein the inlet channel (52) is located in a plane that is parallel to both the inlet channel axis and the ejection axis and which intersects both axes, 15) a raised rib formation disposed on a floor or wall of the nozzle chamber adjacent the inlet channel,

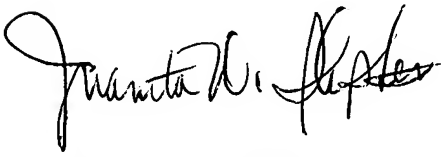
for impeding backflow of ink during the actuation, 16) wherein the rib formation at least partially encircles the inlet channel, 17) wherein the rib formation comprises a collar that encircles the inlet channel, 18) wherein the rib formation comprises a radially inward-extending lip, and 19) wherein the actuator is rotatably moved about a pivot region upon actuation and the inlet channel is disposed closer to the pivot region than to the ejection port. The nozzle arrangement of Figure 5A in the application perform the same function as the nozzle arrangement of Fig. 1 in US 6,435,667 B1, since the structure of both Figures are the same.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Juanita D. Stephens
Primary Examiner
Art Unit 2853

February 18, 2005